

IN THE ABSTRACT

Please amend the Abstract as follows:

-- ABSTRACT

A method and apparatus for secure data transmission via network.

Transmission side transmits processed data (DB), second signed data (SB, 740) obtained by applying one-way function to merged data of the processed data (DB) and first signed data of an original image and ciphering the output of the one-way function with transmission side secret key, and ciphered signed data (SAE) obtained by ciphering the first signed data with reception side ~~private~~public key. Data reception side enciphers received ciphered signed data (SAE') with reception side secret key to obtain third signed data (SA'), applies one-way function to merged data (DC') of received processed data (DB') and the third signed data (SA'), enciphers received second signed data (SB') with transmission side ~~private~~public key (KDB), compares result obtained by applying the one-way function to the merged data with result obtained by enciphering the second signed data for data validation. --